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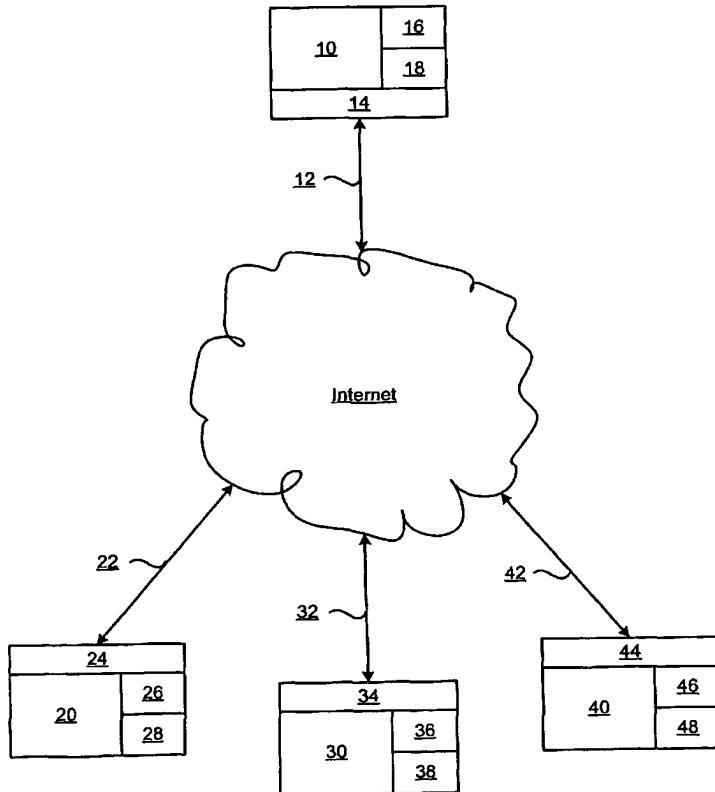
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[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR CONVEYING PRIVATE INFORMATION WITHIN A GROUP COMMUNICATION SYSTEM



(57) Abstract: The present invention relates to an apparatus and method for distribution of a streamed signal within a group of users in a computer network, the users accessing client terminals (10, 20, 30, 40) for participation in a multicast session. The apparatus comprises connecting links (12, 22, 32, 42) adapted to connect the client terminals of users and related equipment, such as capturing means (16, 26...; 18, 28...), to the multicast session, preferably via the Internet or other interconnecting network. An extension header is added to data packets of the streamed signal, the extension header comprising identification data relating to the intended recipient of a packet. The invention is characterised in that a filtering means (14, 24, 34, 44) is associated with the receiving client adapted to filter out data packets having the address of the recipient and receiving the streamed signal. Consequently, the existing communication channel can be reused.



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE 03/01030

A. CLASSIFICATION OF SUBJECT MATTER

**IPC7: H04L 12/56, H04L 12/22, G06F 15/16**  
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

**IPC7: H04L, H04B, H04Q, G06F**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

**SE, DK, FI, NO classes as above**

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**EPO-INTERNAL, WPI DATA, PAJ, INSPEC**

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| X         | <b>Michael Smirnov et al "Programmable Group Communication Services over IP Multicast"</b><br>High Performance Switching and Routing, 2000. ATM 2000. Proceedings of the IEEE Conference 26-29 June 2000<br>Page(s): 281-289<br>see abstract and section 2 "Value and services over IP Multicast" and section 3.5 "Messages" | 1-4                   |
| A         | US 2002057663 A1 (BYUNG KEUN LIM), 16 May 2002 (16.05.02), see the summary of the invention  | 1-4                   |

Further documents are listed in the continuation of Box C.

See patent family annex.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|-----------|--|-----------------------|
| A         | Brian Neil Levine et al "Improving Internet Multicast with Routing Labels"<br>Network Protocols, 1997. Proceedings., 1997<br>28 -31 October 1997<br>Page(s): 241-250<br>see section 1 "Introduction"<br>--   | 1-4                   |
| A         | Kate Jenkins et al "A Gossip Protocol for Subgroup Multicast"<br>Distributed Computing Systems Workshop. 2001<br>16-19 April 2001<br>Page(s): 25-30<br>see section 1 "Introduction"<br>--  | 1-4                   |
| E,X       | US 6490586 B1 (GERA GOFT ET AL), 3 December 2002<br>(03.12.2002), figure 7, claims 1-7<br>--   | 1-4                   |
| X         | A1-Shaer, E. et al<br>"Application-layer group communication server for extending reliable multicast protocols services"<br>Network Protocols, 1997. Proceedings., 1997<br>International Conference on 28-31 October 1997<br>pages: 267-274<br>see page 273 section, Raid and Dynamic Sub-Group Formation<br>--<br>----- | 1-4                   |

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

26/07/03

International application No.  
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| Patent document cited in search report | Publication date | Patent family member(s) |              | Publication date |
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| US 2002057663 A1                       | 16/05/02         | KR                      | 2002037792 A | 23/05/02         |
|  |                  | KR                      | 2002037793 A | 23/05/02         |

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| US 6490586 B1 | 03/12/02 | IL | 137383 D | 00/00/00 |
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